**SCH4U Unit 5 Electrochemistry:**

Lesson 3: Balancing Redox Reactions using the Oxidation Number Method.

***Redox Equation Quiz***

1. Break each equation into two half-reactions. Identify each half-reaction as oxidation or reduction.

a) Cu + 2 H+ → Cu2+ + H2

b) 2 Al + 3 S → Al2S3

2. Balance the Following REDOX equations using the oxidation number method.

a) Ag + Cr2O72- + H+ → Ag+ + Cr3+ + H2O

b) CdS + I2 + HCl → CdCl2 + HI + S

**SCH4U Unit 5 Electrochemistry:**

Lesson 3: Balancing Redox Reactions using the Oxidation Number and Half Reaction Method

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***Redox Equation Quiz***

1. Break each equation into two half-reactions. Identify each half-reaction as oxidation or

reduction.

a) Cu + 2 H+ → Cu2+ + H2

**Cu → Cu2+ + 2 e-**Oxidation

**2 H+ + 2 e- → H2** Reduction

b) 2 Al + 3 S → Al2S3

**2 Al → 2Al3+ + 6 e-** Oxidation

**3S + 6e- → 3 S2-** Reduction

2. Balance the Following REDOX equations using the oxidation number method.

a) Ag + Cr2O72- + H+ → Ag+ + Cr3+ + H2O

**6Ag + Cr2O72- + 14 H+ → 6Ag+ 2Cr3+ + 7H2O**

b) CdS + I2 + HCl → CdCl2 + HI + S

**CdS + I2 + 2 HCl → CdCl2 + 2 HI + S**